Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Petition of SBC Communications Inc.	)	WC Docket No. 04-36
For a Declaratory Ruling Regarding	)	
IP Platform Services	)	

PETITION OF SBC COMMUNICATIONS INC. FOR A DECLARATORY RULING

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SUMMARY

Congress directed the Commission to ensure that the Internet be kept "unfettered by Federal or State regulation,"[1] and to "encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans" through the removal of regulation.[2] With this petition, SBC asks the Commission to implement that directive with respect to the numerous innovative services based on the Internet Protocol ("IP") that are rapidly proliferating in the communications market today. Specifically, SBC seeks confirmation that IP platform services — defined as those services that enable any customer to send or receive communications in IP format over an IP platform — are not subject to Title II regulation.

Title II regulation of IP platform services would be both unnecessary and harmful. In contrast to the public switched telephone network ("PSTN,") the IP platform is an overlay network characterized by low barriers to entry, making this market highly competitive without any need for governmental intervention. Regulation of these services would discourage innovation and investment, and would be unable to keep pace with the rapidly developing technology of the Internet. In fact, investment and innovation in IP platform services are already being threatened by regulatory uncertainty that has arisen as state commissions and courts begin to regulate IP platform services in the absence of definitive action by the Commission precluding them from doing so.

In order to create a stable deregulatory framework for IP platform services, the Commission should declare that such services are categorically interstate communications that

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1 47 U.S.C. § 230(b)(2).

2 *Id.* § 157(a) notes.

are subject to the Commission's exclusive jurisdiction under Title I of the Communications Act. By virtue of the internationally dispersed nature of the Internet itself, IP platform services are inherently interstate for the same reasons cited by the Commission with respect to the Internet. To the extent the Commission finds a need to regulate IP platform services, it may use its Title I authority to tailor specific regulatory requirements regarding such issues as E911 compliance, communications assistance to law enforcement, universal service, and access for disabled persons.

The Commission should also declare that IP platform services are not subject to the Title II regime applicable to telecommunications carriers. Because IP platform services intrinsically offer the capability for manipulating information, they are correctly viewed as "information services," which the Commission has recognized are properly treated under Title I. In addition, IP platform services can be classified as "private carriage" offerings, since they are provided through individually tailored commercial arrangements.

In addition, the Commission should declare that the *Computer II* unbundling requirements do not apply to IP platform services. Requiring providers of IP platform services to isolate a transmission component of each offering and provide it as a telecommunications service would, like the imposition of Title II regulation generally, constrain the innovation and investment that are essential to the continued development of these technologies.

A Commission declaration limiting the scope of Title II regulation as requested herein would in no way affect existing regulation of legacy services and facilities by either state or federal regulators, or predetermine the outcome of pending proceedings relating to legacy broadband services. No matter what services an ILEC might provide over facilities in its network, a CLEC would still be entitled to lease those underlying network elements that meet the

standards of section 251(d)(2), as such standards are evaluated from time to time by the Commission. Furthermore, ILECs would remain subject to the *Computer II* obligations in offering non-IP-based information services, thus ensuring unbundled access to the basic serving elements of these legacy services.

In sum, by declaring that IP platform services are not subject to Title II regulation, the Commission would preclude the encroachment of common carrier regulation into the IP sphere, maintain the status quo for IP platform services, and accommodate with regulatory certainty the evolution of IP network technology, services, and applications.

TABLE OF CONTENTS

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	)	
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PETITION OF SBC COMMUNICATIONS INC. FOR A DECLARATORY RULING

Pursuant to 47 C.F.R. § 1.2, SBC Communications Inc. ("SBC") hereby petitions the Commission to reaffirm that its longstanding practice of regulatory restraint with respect to the Internet will continue to apply to the inextricably linked services and network functionalities that rely on the Internet Protocol ("IP") platform, referred to herein as "IP platform services."[3] The Commission wisely has shown no signs of departing from its established approach in this context, which is mandated by Congress's directive to keep the Internet, which is simply a vast collection of interconnected IP platforms, "unfettered by Federal or State regulation."[4] But other regulatory bodies *have* begun to take divergent actions in the absence of a definitive Commission statement precluding them from doing so. Given the resulting legal uncertainty, the Commission should now formalize its nonregulatory policy to ensure that the Internet remains insulated from unnecessary and harmful economic regulation at both the federal and state levels. Myriad

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3 As discussed more fully below, "IP platform services" consist of (a) IP networks and their associated capabilities and functionalities (*i.e.*, an IP platform), and (b) IP services and applications provided over an IP platform that enable an end user to send or receive a communication in IP format.

4 47 U.S.C. § 230(b)(2).

entities of all kinds are today providing or poised to provide IP platform services of diverse types. Prompt Commission action is therefore critical to provide regulatory certainty and stability and to ensure that the Internet success story will continue.

Such action should include three steps. *First*, the Commission should confirm that IP platform services are indivisibly interstate communications and therefore fall within the Commission's exclusive regulatory jurisdiction under Title I of the Communications Act. To the extent the Commission finds it appropriate from time to time to impose particular regulatory obligations on such services, it may do so pursuant to its Title I authority. *Second*, the Commission should rule definitively that IP platform services do not fit any of the service-specific legacy regulatory regimes in Titles II, III, or VI of the Communications Act, notwithstanding that particular applications riding on top of the IP platform may have attributes of traditional services regulated under those Titles.[5] *Third*, the Commission should declare that the *Computer II* unbundling requirements do not apply to IP platform services or IP platforms.

Fencing IP platform services off from economic regulations traditionally applied to legacy telecommunications services would not put them beyond the reach of regulation necessary to promote important public policy goals (such as universal service, public safety/E-911, communications assistance for law enforcement, and disability access), nor would it threaten competitive access to the legacy facilities underlying these services. But it would mean that future regulatory decisions would start from the premise that IP platform services are

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[5] To remove any doubt about the inapplicability of Title II or the other service-specific Titles of the Act to IP platform services, the Commission should forbear from applying any such provisions that might otherwise be found to apply. SBC is filing its forbearance request in a separate petition. That petition incorporates the arguments presented herein by reference, in light of the close relationship between SBC's requests for a declaratory ruling and for forbearance.

unregulated. Neither regulators nor courts would address these services from a presumption that legacy economic regulations under Titles II, III, or VI apply unless removed on a piecemeal basis. Rather, the Commission could craft and apply any necessary and appropriate regulatory requirements under Title I. Only by establishing this "bottom up" approach can the Commission remain true to its properly lauded tradition of fostering the growth of the Internet through a policy of prudent "unregulation."[6]

BACKGROUND

In enacting the Telecommunications Act of 1996, Congress made unequivocally clear that the Internet should remain unregulated. As Congress found, "[t]he Internet and other interactive computer services have flourished, to the benefit of all Americans, with a minimum of government regulation."[7] Accordingly, Congress declared that it "is the policy of the United States" to "preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, *unfettered by Federal or State regulation.*"[8] Congress viewed the elimination of unnecessary and harmful regulation as essential to promoting the Internet's continued growth; its very purpose in passing the Telecommunications Act of 1996 was to "reduce regulation in order to . . . encourage the rapid deployment of new telecommunications technologies."[9] Congress therefore directed the Commission to "encourage

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6 *See* Jason Oxman, *The FCC and the Unregulation of the Internet*, Office of Plans and Policy, OPP Working Paper No. 31, Federal Communications Commission (July 1999), *available at* http:// ftp.fcc.gov/Bureaus/OPP/working_papers/oppwp31.pdf.

7 47 U.S.C. § 230(a)(4).

8 *Id.* § 230(b)(2) (emphasis added).

9 Preamble to the Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56.

the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans," using "regulatory forbearance" and "other regulating methods that remove barriers to infrastructure investment."[10] In order to facilitate the Commission's execution of these mandates, Congress defined the Internet broadly and inclusively.[11]

As IP platform services evolve and supplant legacy communications services throughout the industry, and as nontraditional providers of all types enter this market, the Commission should exercise its considerable discretion to maximize the potential of IP platform services by affirming conclusively that they are securely outside legacy economic regulation. Consistent with that goal, this petition asks the Commission to adopt a comprehensive federal solution as promptly as possible and to embrace an appropriately broad understanding of the services and networks subject to an express hands-off policy for the Internet.[12]

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10 47 U.S.C. § 157(a) notes.

11 *See id.* § 231(e)(3) ("The term 'Internet' means the combination of computer facilities and electromagnetic transmission media, and related equipment and software, comprising the interconnected worldwide network of computer networks that employ the Transmission Control Protocol/Internet Protocol or any successor protocol to transmit information."); *id.* § 230(f)(1) (defining the Internet as "the international computer network of both Federal and non-Federal interoperable packet switched data networks"); *id.* § 230(f)(2) (defining interactive computer service to include "any information service, system, or access software provider . . . including specifically a service or system that provides access to the Internet . . . .").

12 The Commission is currently considering the application of its *existing* access charge rules to long distance voice *telecommunications services* that use IP as a transport technology. *See Petition for Declaratory Ruling that AT&T's Phone-to-Phone IP Telephony Services are Exempt from Access Charges*, Docket No. WC-02-361 (filed Oct. 18, 2002). We urge the Commission to resolve that matter expeditiously. *See* Opposition of SBC Communications Inc., *Petition for Declaratory Ruling that AT&T's Phone-to-Phone IP Telephony Services are Exempt from Access Charges*, Docket No. WC 02-361 (Dec. 18, 2002); Reply Comments of SBC Communications Inc., *Petition for Declaratory Ruling that AT&T's Phone-to-Phone IP Telephony Services are Exempt from Access Charges*, Docket No. WC-02-361 (filed Jan. 24, 2003); Ex Parte Letter from James Smith, SBC, to Michael Powell, FCC, WC Docket No. 02-

1. *The Commission's Policy of Unregulation*

Congress's directives in the 1996 Act regarding the regulatory treatment of the Internet codify and build on well-established policies of the Commission. The Commission has consistently sought to ensure that the Internet will remain a regulation-free zone: In its own words, "[t]he Commission does not regulate internet services[.]"[13] As the Commission has said, "[w]e recognize the unique qualities of the Internet, and do not presume that legacy regulatory frameworks are appropriately applied to it."[14] The roots of this policy lie in the Commission's treatment of enhanced services in the *Computer Inquiries* over 20 years ago. Recognizing the enormous potential of enhanced services generally, the Commission resisted calls to regulate such services under Title II, concluding that subjecting them "to a common carrier scheme of regulation . . . would negate the dynamics of . . . this area."[15] In the Commission's view, "the absence of traditional public utility regulation of enhanced services offers the greatest potential for efficient utilization and full exploitation of the interstate telecommunications network."[16]

The Commission's foresight in establishing a practice of regulatory restraint from the outset has enabled the Internet to get well on its way to achieving its full potential: seamless

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361 (Jan. 14, 2004). The telecommunications services at issue in that proceeding are vastly different from IP platform services, as discussed below.

13 Notice of Proposed Rulemaking, *Local Competition and Broadband Reporting*, 14 FCC Rcd 18100, 18130 ¶ 61 (1999).

14 Report to Congress, *Federal-State Joint Board on Universal Service*, 13 FCC Rcd 11501, 11540 ¶ 82 (1998) ("*Report to Congress*").

15 Final Decision, *Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry)*, 77 F.C.C.2d 384, 431-32 ¶ 123 (1980) ("*Computer II*").

16 *Id.* ¶ 7.

convergence of voice, data, and video, with an array of constantly proliferating and evolving IP platform services. Once the hobby of a few thousand computer enthusiasts, the Internet now links upwards of 665 million users.[17] And hundreds if not thousands of entities now offer Internet access and related applications.[18]

The Internet is capable of not only mirroring — and combining — the capabilities of most traditional methods of electronic communication, but also offering users a wealth of new features and functionalities that were not possible before. Voicemail can appear as an MP3 file in a user's e-mail. Telephones can be plugged into or even replaced by computers. Americans can use their computers to watch soccer matches, in real time, from halfway across the globe. Increasing numbers of users rely on "Internet radio" as an eclectic alternative to traditional broadcast radio, with equivalent or superior sound quality. And business videoconferencing can include real-time interactive file-sharing features that greatly enhance productivity. These are just tips of the iceberg: Other innovative end-user services are introduced every day. And policies that increase availability of broadband will cause such services to proliferate even faster.

The Internet's resounding success story over the past decade is the ultimate validation of the Commission's policy of regulatory restraint. As the Commission has found, "[t]he Internet

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[17] *Beyond the Bubble*, The Economist at 4 (Oct. 11, 2003). One study estimated that, as of July 2003, 62% of the population in the United States used the Internet, an increase of 86% since 2000. *See* http://www.internetworldstats.com. The same study estimated that there are currently almost 680 million Internet users worldwide. *See id.* Other researchers predict that the number of Internet users worldwide will approximate 945 million in 2004 and 1.46 billion in 2007. *See* eMarketer, March 2002, available at http://www.epaynews.com/statistics/ mcommstats.html#44 (last visited July 18, 2003).

[18] For example, the website www.findanisp.com currently rates over 2,700 different Internet service providers ("ISPs"). In addition, the website http://www.ecommerce1.com lists 103 Internet software providers and 287 Internet hardware providers.

and other enhanced services have been able to grow rapidly in part *because* the Commission concluded that enhanced service providers were not common carriers within the meaning of the Act."[19] As noted above, Congress adopted and codified this conclusion in the 1996 Act, finding a direct connection between the absence of regulation and the Internet's continued growth, and declaring that it was "the policy of the United States" to stay the course first set by the Commission and preserve the Internet's unregulated status.[20]

2. *The Internet Today and Tomorrow*

An understanding of the Internet's evolution generally and the operation of IP platform services in particular is essential in order faithfully to implement the congressional directive to keep the Internet "unfettered by Federal or State regulation."[21] As discussed below, IP platform services function quite differently from those provided over traditional circuit-switched networks. These functional differences have allowed the Internet marketplace to become highly competitive, making regulation of the Internet both *unnecessary* and *harmful*.

a) *The Design, Operation, and Capabilities of IP-Based Networks Differ Significantly from Those of the Traditional Circuit-Switched Network and Demand Different Regulatory Treatment.*

IP-based networks are fundamentally different from the circuit-switched network. The traditional circuit-switched network — often referred to as the "public switched telephone network," or "PSTN" — was designed, as the latter designation indicates, for a single application: voice telephony. In fact, the very nature of circuit switching makes it inefficient for

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19 *Report to Congress* at 11546 ¶ 95 (emphasis added).

20 47 U.S.C. § 230(b)(2).

21 *Id.*

other applications. Because a circuit-switched network dedicates a fixed amount of capacity (the circuit) for the duration of the communication regardless of whether information is being transmitted, it is an inefficient medium for the transmission of data traffic. Moreover, the bandwidth of a circuit-switched transmission is typically quite narrow, which precludes its use for large quantities of information that must be sent simultaneously and continuously in real-time, such as video.

IP-based networks differ radically, because their underlying technology is fundamentally different from circuit switching. IP platforms are specifically designed to handle huge quantities of information at high speeds and to transmit myriad communications of all types. The IP platform utilizes packet switching, in which all information — including voice, data, and video — is broken down into individual packets, each representing a portion of the message sent.[22] Each packet is labeled to contain information that helps it arrive at its final destination — such as its originating and terminating endpoints and the number of packets that constitute the particular

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22 As the FCC has described:

> The Internet is a distributed packet-switched network, which means that information is split up into small chunks or "packets" that are individually routed through the most efficient path to their destination. Even two packets from the same message may travel over different physical paths through the network. Packet switching also enables users to invoke multiple Internet services simultaneously, and to access information with no knowledge of the physical location of the server where that information resides.

Report to Congress at 11532 ¶ 64; *see also* Memorandum Opinion and Order, *Independent Data Communications Manufacturers Association, Inc. Petition for Declaratory Ruling that AT&T's InterSpan Frame Relay Service is a Basic Service*, 10 FCC Rcd 13717, 13718 ¶ 3 (1995).

message.[23] The packets then travel over different routes to their ultimate destination, where they are reassembled.[24]

The emergence of the suite of protocols known collectively as IP has enabled providers to fully exploit these intrinsic benefits of packetization. Pursuant to widespread voluntary agreement, IP is the universal language of the Internet. This common, open code permits communications to travel seamlessly across national and, more importantly, technological borders. The use of IP has a dramatic impact on the nature and range of services the Internet can support, as compared to what is available over the circuit-switched network:

- *First*, the universality of IP permits unprecedented interconnectivity among otherwise dispersed networks. The Internet is the end product of this interconnectivity.
- *Second*, IP permits convergence of services that have traditionally been carried on different networks. Voice, data, and video can be unified by the language of IP, enabling them to be consolidated on a single network and transmitted simultaneously, with the packets commingled until they arrive at their respective destinations. Multiple applications can thus be offered concurrently and on a tightly integrated basis. The infinite possibilities of convergence stimulate innovation in the development and combination of additional services.

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[23] *See Report to Congress* at 11531 ¶ 62 n.124 ("IP defines the structure of data, or 'packets,' transmitted over the Internet.").

[24] The FCC has stated:

> "The path of least resistance" is the fundamental theory on which the Internet was built. Invented for the sole purpose of discovering a way to get important or large amounts of data from one location to another quickly, regardless of failures or delays in traditional communications networks, data packets over the Internet will take any path that does not resist transfer. The path of least resistance is not always the shortest path, but for data, it is the most reliable path for the mass transfer of data.

Fifth Annual Report, *Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming*, 13 FCC Rcd 24284, 24320-21 ¶ 58 n.242 (1998).

- *Third*, packetization, together with the continually improving labeling functions of packet networks, permits calls to be transported more efficiently. The network can distribute the individual packets making up a particular message across different paths, and can route them dynamically in ways that avoid any problems in the network.

- *Finally*, the flexibility that is inherent in the IP platform gives end users unprecedented control over the services they receive. Customers can interact with stored data on a provider's network to customize their services to accommodate business, network, or other needs, integrating multiple applications as desired and according to their specific bandwidth and capacity requirements, in ways that are simply not possible over the circuit-switched network.

The rich variety of new service options available over IP platforms are possible precisely because of the characteristics that distinguish those platforms from the circuit-switched network. The IP platform is an overlay network, consisting of its own routers and IP-enabled facilities, that has been built separate and discrete from the circuit-switched network and traditional Asynchronous Transfer Mode ("ATM") and frame relay networks. In contrast to the circuit-switched network, the Internet is highly "modular," in that particular providers can and do specialize in supplying services on one layer without supplying services on another, and can compete effectively in doing so. The openness and modularity of the IP platform enable non-facilities-based providers of all types to offer services over the networks of others. As a result, the IP platform is itself dispersed and highly competitive, consisting of individual IP networks that operate independently of each other yet peer and interconnect with each other in individually tailored ways.

The technological differences between the traditional circuit-switched network and the IP platform bear directly on the manner in which these networks can and should be regulated. Because the circuit-switched network historically supported a single application — voice telephone calls — that service, and the network over which it was provided, were subjected to an essentially service-specific regulatory regime under Title II of the Act. This approach found

itself echoed in other service-specific regulatory "silos," such as Title III (and Title II) for wireless voice and data traffic, and Title VI for cable-based video service. But the technology underlying IP-based networks, and the ability of such networks to converge services, defy such segregation. As noted, IP networks integrate multiple services into a single bitstream, making it virtually impossible to know which packets relate to which application. As a result, the service and network categories on which traditional regulation was based cannot practically be applied in an IP world.

b) *The Internet is a Competitive Marketplace that Operates Without Regulatory Intervention Today.*

As a result of the Internet's open architecture and independence from traditional legacy networks, the Internet is characterized by low barriers to entry and an absence of market power that make regulation decidedly unnecessary. The nondiscriminatory quality of the Internet's open-standards architecture means that *any* entity can provide IP platform services simply by acquiring the necessary routers and links between them. As a result of the ease with which new participants can enter this marketplace, the Internet has evolved as a highly competitive, dispersed, and egalitarian "network of networks" — as its very name indicates.[25] These networks are operated by carriers and noncarriers alike, including governments, academic entities, and large and small private businesses.

Indeed, new and often "nontraditional" entities regularly enter the IP platform services market, setting up managed networks that serve their own or their customers' needs but which

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[25] Memorandum Opinion and Order, *Application of WorldCom, Inc. and MCI Communications Corp. for Transfer of Control of MCI Communications Corp. to WorldCom, Inc.*, 13 FCC Rcd 18025, 18105 ¶ 144 (1998) ("*WorldCom/MCI Merger Order*").

are interconnected with the "public" Internet. These entrants include equipment manufacturers, software companies, and other "noncarriers."[26] In this respect, the Internet stands in sharp contrast to the legacy circuit-switched and cable networks, each of which historically was owned by one provider that supplied most or all of the necessary facilities and services.

The modularity of IP-based networks and of the services and applications that ride on them enables competitors to enter the market at a variety of levels. Some providers focus their business plans on developing computer hardware or software, while others concentrate on the provision of discrete services such as backbone transport, Internet access, or specialized interactive content. The Commission itself has recognized that the market includes Internet access providers, application providers, content providers, and backbone providers, each of which specializes in a different aspect of Internet communications.[27] Many of these entities enter into partnerships in which each member provides one aspect of a service needed to meet a

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[26] For example, the Commission has noted that several mobile data providers "offer — either directly to individual consumers or to enterprise customers to implement for their employees — the ability to access on a mobile device company intranets and files stored on corporate servers," allowing customers to establish virtual private networks. Eighth Report, *Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993*, 18 FCC Rcd 14783, 14856 ¶ 167 (2003). Likewise, manufacturers of handheld devices such as Palm Pilots and Blackberrys have teamed up with Internet access providers to give their customers wireless Internet access. *See* Sixth Report, *Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993*, 16 FCC Rcd 13350, 13413-17 (2001).

[27] *See generally Report to Congress* at 11531 ¶ 62.

user's communications needs.[28] Often, these entities are customers of each other.[29] These attributes account for the very low concentration in the Internet marketplace. The Internet, and all the varied applications offered over it, show no signs of domination by the operators of the legacy wireline networks traditionally subject to Title II regulation; to the contrary, "[t]he Internet is a loose interconnection of networks belonging to many owners."[30] Indeed, incumbent telecommunications operators are at most secondary players in this market.

The cooperative arrangements through which multiple players provide IP platform services were established in the open market, *without* government regulation. For example, multiple Internet backbones are connected through either peering or transiting arrangements — private contractual arrangements by which Internet backbone providers exchange traffic.[31] As the Commission has recognized, these arrangements have proliferated notwithstanding that Internet backbone providers "compete with one another for ISP customers"; indeed, in order to remain competitive, "they must also cooperate with one another, by interconnecting, to offer their end users access to the full range of content and to other end users that are connected to the

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[28] For example, ServInt provides Internet access and backbone services, but it partners with various software and content providers in order to provide expanded Internet services to its customers. *See* http://www.servint.net/partners/network/index.html.

[29] For example, Aleron is a provider of Internet backbone services that counts many Internet service providers among its customers. *See* http://www.aleron.com/info/.

[30] *Report to Congress* at 11531 ¶ 62.

[31] *See* Michael Kende, *The Digital Handshake: Connecting Internet Backbones*, Office of Plans and Policy, OPP Working Paper No. 32, Federal Communications Commission at 4-8 (Sept. 2000); *WorldCom/MCI Merger Order* at 18105 ¶ 144. Peering arrangements and transiting arrangements differ in that, under the former, the providers do not charge each other for terminating traffic and will terminate only each other's traffic (and not that of a third-party provider). *See id.* at 18105-06 ¶¶ 145-46.

Internet."[32] As a result of these voluntary arrangements, the Commission concluded, "the Internet backbone is currently growing at an exponential rate."[33] Similarly, in discussing the regulation of cable modem service, the Commission noted that the many business relationships on which the Internet relies "are still evolving through negotiations and commercial decisions."[34]

c) *The Internet's Future Evolution Depends on Continued Unregulation of IP Platform Services.*

Regulation of IP platform services not only is unnecessary, but also would be affirmatively harmful to the continued development of the Internet as the communications mode of the future. The Commission has recognized that, as compared to regulation,

> [c]ompetitive markets are superior mechanisms for protecting consumers by ensuring that goods and services are provided to consumers in the most efficient manner possible and at prices that reflect the cost of production. Accordingly, where competition develops, it should be relied upon as much as possible to protect consumers and the public interest. In addition, using a market-based approach should minimize the potential that regulation will create and maintain distortions in the investment decisions of competitors as they enter local telecommunications markets.[35]

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32 *WorldCom/MCI Merger Order* at 18105 ¶ 144.

33 *Report to Congress* at 11533-34 ¶ 68.

34 Declaratory Ruling and Notice of Proposed Rulemaking, *Inquiry Concerning High-Speed Access to the Internet over Cable and Other Facilities*, 17 FCC Rcd 4798, 4818 ¶ 30 (2002) ("*Cable Modem Order*"), *rev'd on other grounds sub nom. Brand X Internet Servs. v. FCC*, 345 F.3d 1120 (9th Cir. 2003).

35 First Report and Order, *Access Charge Reform*, 12 FCC Rcd 15982, 16094 ¶ 263 (1997); *see also, e.g.*, Report and Order, *Procedures for Implementing the Detariffing of Customer Premises Equipment and Enhanced Services (Second Computer Inquiry)*, 95 F.C.C.2d 1276, 1301 ¶ 38 (1983) ("Regulation often can distort the workings of the market by imposing costs on market participants which they otherwise would not have to bear. . . . [T]he advent and growth of competition in a particular market eliminates the need for continued regulation.").

Government intervention is particularly undesirable in the Internet context, because the market is not only highly competitive but extremely dynamic. It was for this reason that the Commission refrained from regulating the Internet backbone; as the Commission observed, "The technology and market conditions relating to the Internet backbone are unusually fluid and fast-moving, and we are reluctant to impose any regulatory mandate that relies on the persistence of a particular market model or market structure in this area."[36] Regulation is incapable of keeping up with the rapid pace of transformative change that the Internet has brought to electronic communications generally.[37]

One manifestation of the dynamic nature of the Internet is the rapid and continuing erosion of any distinction between the public Internet and customer-specific, "managed" IP networks. Today, customers rely on managed networks to address the quality of service ("QoS") limitations that stem from what may be regarded as the "best effort" capabilities of the public Internet. To a large extent, the interconnected IP platforms making up the public Internet have operated without guarantees regarding how quickly or reliably information will reach its destination. As a result, today's public Internet often delivers traffic however it can without assurances of dedicated bandwidth, traffic prioritization, or differentiation between applications or between users that require particular service parameters. While these "best effort" capabilities

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[36] *Report to Congress* at 11535-36 ¶ 72. As discussed below, however, merely because a telecommunications service is transported over an Internet backbone for some distance does not mean that the service is exempt from certain obligations when it originates or terminates on a traditional telecommunications network.

[37] *See* "FCC Cable Chief Says 'Open' Internet is Primary Goal — Cites Agreement of Consumers and Industry," News Release (rel. 1999) ("To regulate [the Internet] at this juncture would be to say that the market has failed before the market has been given a chance.").

are perfectly suitable for certain types of Internet traffic — such as e-mail, file transfer, and other data applications that are not sensitive to packet loss or delay — these limitations are much more likely to impede higher-level applications: Voice and video traffic, for example, cannot tolerate the same degree of delay as data traffic. Managed networks have avoided this problem by allowing for the active management of traffic flows in a way that meets the particular requirements of different types of traffic and different end users.

But a variety of technologies for delivering QoS on the *shared* network are rapidly being introduced. QoS will allow IP platform services on the public Internet to become increasingly dynamic, user-specific, and customer-driven, thus eliminating relevant distinctions between managed and public networks.[38] And managed networks are increasingly linked to the public Internet. Developments such as these occur more quickly than regulators can anticipate, and any attempts to draw regulatory distinctions between, for example, "public" and "managed" IP networks would be obsolete before the ink was dry on the regulations.

In short, any attempt to impose regulation in this area would inevitably lag behind the newest developments and technological applications. That regulatory drag would discourage the

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[38] *See* Alice Mack, *Carrier-Class in an IP World, available at* http://www.iec.org/cgi-bin/acrobat.pl?filecode=226. There are various solutions under development. For example, Integrated services ("IntServ") uses explicit signaling whereby a given application requests a specific kind of service or resources it needs from the IP network before it sends the data. Under differentiated services ("DiffServ"), each packet is marked so as to determine the behavior that each hop in the path must support so that no packet has to wait. Packets assigned to a given class of service are provided the same treatment at each node or router over each hop such that the per-hop behavior is predetermined. With Multiprotocol Label Switching ("MPLS") (a draft networking standard that is not yet finalized), packets are assigned a "label," and special MPLS-compatible routers then assign the packets priority and routing based on the contents of the label. This allows network operators to guarantee the needed level of performance and route around network congestion.

innovation and new investment that are essential to the Internet's growth. As Commissioner Abernathy has cautioned:

> [I]t is important that we also act as technology facilitators — that is — we must recognize and reduce regulatory barriers to entry for emerging technologies through the adoption of policies that tap the benefits of emerging technologies. . . . [W]e should enact rules that allow free market forces to decide whether a particular technology succeeds or fails. In this manner, the market will dictate the success of technologies, not regulators.[39]

Similarly, as Chairman Powell remarked at the Commission's recent forum on voice-over Internet Protocol ("VoIP") telephony, "No regulator, either federal or state, should tread into this area without an absolutely compelling justification for doing so. Innovation and capital investment depend on this premise. The entrepreneurs seated before us depend upon this premise."[40] And Commissioner Copps noted at the VoIP forum that "[w]e are dramatically changing the way we communicate in this country, and around the globe, and we are challenged to adjust our policies and rules not only to accommodate, but to facilitate, this process of change."[41]

Maintaining the government's hands-off approach is critical to ensure the continued flow of money and new ideas into the Internet marketplace, and thus the success of this technology. Indeed, the Commission has repeatedly noted that it can "encourage investment and innovation

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39 FCC Commissioner Kathleen Q. Abernathy, "The Importance of the Market," 3G Americas Board Briefing (June 3, 2003).

40 "Opening Remarks of FCC Chairman Michael K. Powell at the FCC Forum on Voice over Internet Protocol (VoIP)," News Release (rel. Dec. 1, 2003) ("*Powell VoIP Forum Remarks*").

41 "Opening Remarks of Commissioner Michael J. Copps, Voice over Internet Protocol Forum," News Release (rel. Dec. 1, 2003) ("*Copps VoIP Forum Remarks*").